

10/31/01  
JCS960 U.S. PTO

12-03-01 A

Please type a plus sign (+) in this box  PTO/SB/05 (4/98)

Approved for use through 09/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

# UTILITY PATENT APPLICATION TRANSMITTAL

*(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))*

Attorney Docket No.	KVC-051.01
First Inventor or Application Identifier	Sidney M. Bennett
Title	Angle Random Walk (ARW) Noise Reduction in Fiber Optic Sensors using an Optical Preamplifier
Express Mail Label No.	EL 408067980 US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  \* Fee Transmittal Form (e.g. PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2.  Specification *[Total pages 23]*  
(referred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R&D
  - Reference to Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
3.  Drawing(s) (35 U.S.C. 113) *(Total Sheets 3)*
4. Oath or Declaration *(Total Sheets 1)*
  - a.  Newly executed (original or copy)
  - b.  Copy from a prior application (37 C.F.R. § 1.63 (d))  
*(for continuation/divisional with Box 16 completed)*
  - i.  **DELETION OF INVENTOR (S)**  
Signed statement attached deleting inventor(s) named in the prior application see 37 C.F.R. § 1.63(d)(2) and 1.33(b)

ADDRESS TO:  
Commissioner to Patents  
Box Patent Application  
Washington, DC 20231

5.  Microfiche Computer Program (Appendix)
6. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a.  Computer Readable Copy
  - b.  Paper Copy (identical to computer copy)
  - c.  Statement verifying identity of above copies

1036 U.S. PTO  
109/998944  
10/31/01**ACCOMPANYING APPLICATION PARTS**

7.  Assignment Papers (cover sheet & document(s))
8.  (37 C.F.R. § 3.73) Statement  Power of Attorney  
*(when there is an assignee)*
9.  English Translation Document *(if applicable)*
10.  Information Disclosure Statement (IDS) PTO-1449  Copies of IDS Citations
11.  Preliminary Amendment
12.  Return Receipt Postcard (MPEP 503)  
*(Should be specifically itemized)*
13.  \*Small Entity Statement  Entitled to claim small entity status.  
(PTO/SB/09-12)
14.  Certified Copy of Priority Documents(s)  
*(if foreign priority is claimed)*
15. Other

Check in the amount of \$694.00 for filing fees

\* NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27) EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

16. If a CONTINUING APPLICATION, check appropriate, box, and supply the requisite information below and in preliminary amendment:

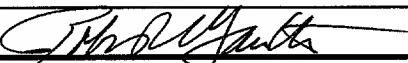
Continuation  Divisional  Continuation-in-part(CIP)  of prior application No: \_\_\_\_\_ /  
Prior application information Examiner: \_\_\_\_\_ Group / Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporations can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**

Customer Number or Bar Code Label **Customer No: 25181**  Correspondence address below  
(Insert Customer No. or Attach bar code label here)

Name					
PATENT DEPARTMENT					
Address	FOLEY, HOAG & ELIOT, LLP				
	One Post Office Square				
City	Boston	State	MA	Zip Code	02109-2170
Country	US	Telephone	(617) 832-1000	Fax	(617) 832-7000

Name (Print/Type)	Robert W. Gauthier	Registration No Attorney/Agent)	35,153
Signature			Date
			October 31, 2001

Burden Hour Statement: This form is estimated to take 0 2 hour to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO Assistant Commissioner of Patents, Box Patent Application, Washington, DC 20231

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2002

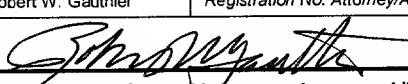
Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT** (\$ 694

Complete If Known	
Application Number	To be assigned
Filing Date	Herewith
First Named Inventor	Sidney M. Bennett
Examiner Name	To be assigned
Group / Art Unit	Not yet assigned
Attorney Docket No.	KVC-051.01

METHOD OF PAYMENT (check one)					FEE CALCULATION (continued)																																																																																																																																																																																														
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to Deposit Account Number: 06-1448  Deposit Account Name: <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Applicant claims small entity status See 37 CFR 1.27					<b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee (\$)</th> <th colspan="2">Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet.</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive – unavoidable</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td>Petition to revive – unintentional</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17 (q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr> <td colspan="5">Other fee (specify) _____</td> <td></td> </tr> <tr> <td colspan="5">*Reduced by Basic Filing Fee Paid</td> <td><b>SUBTOTAL (3) (\$ 0)</b></td> </tr> </tbody> </table>					Fee Code	Large Entity Fee (\$)	Small Entity Fee (\$)	Fee Description		Fee Paid	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet.		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	920	217	460	Extension for reply within third month		118	1,440	218	720	Extension for reply within fourth month		128	1,960	228	980	Extension for reply within fifth month		119	320	219	160	Notice of Appeal		120	320	220	160	Filing a brief in support of an appeal		121	280	221	140	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive – unavoidable		141	1,280	241	640	Petition to revive – unintentional		142	1,280	242	640	Utility issue fee (or reissue)		143	460	243	230	Design issue fee		144	620	244	310	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Processing fee under 37 CFR 1.17 (q)		126	180	126	180	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))		149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))		179	740	279	370	Request for Continued Examination (RCE)		169	900	169	900	Request for expedited examination of a design application		Other fee (specify) _____						*Reduced by Basic Filing Fee Paid					<b>SUBTOTAL (3) (\$ 0)</b>
Fee Code	Large Entity Fee (\$)	Small Entity Fee (\$)	Fee Description		Fee Paid																																																																																																																																																																																														
105	130	205	65	Surcharge - late filing fee or oath																																																																																																																																																																																															
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.																																																																																																																																																																																															
139	130	139	130	Non-English specification																																																																																																																																																																																															
147	2,520	147	2,520	For filing a request for reexamination																																																																																																																																																																																															
112	920*	112	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																															
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																															
115	110	215	55	Extension for reply within first month																																																																																																																																																																																															
116	400	216	200	Extension for reply within second month																																																																																																																																																																																															
117	920	217	460	Extension for reply within third month																																																																																																																																																																																															
118	1,440	218	720	Extension for reply within fourth month																																																																																																																																																																																															
128	1,960	228	980	Extension for reply within fifth month																																																																																																																																																																																															
119	320	219	160	Notice of Appeal																																																																																																																																																																																															
120	320	220	160	Filing a brief in support of an appeal																																																																																																																																																																																															
121	280	221	140	Request for oral hearing																																																																																																																																																																																															
138	1,510	138	1,510	Petition to institute a public use proceeding																																																																																																																																																																																															
140	110	240	55	Petition to revive – unavoidable																																																																																																																																																																																															
141	1,280	241	640	Petition to revive – unintentional																																																																																																																																																																																															
142	1,280	242	640	Utility issue fee (or reissue)																																																																																																																																																																																															
143	460	243	230	Design issue fee																																																																																																																																																																																															
144	620	244	310	Plant issue fee																																																																																																																																																																																															
122	130	122	130	Petitions to the Commissioner																																																																																																																																																																																															
123	50	123	50	Processing fee under 37 CFR 1.17 (q)																																																																																																																																																																																															
126	180	126	180	Submission of Information Disclosure Stmt																																																																																																																																																																																															
581	40	581	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																															
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																																																																																															
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))																																																																																																																																																																																															
179	740	279	370	Request for Continued Examination (RCE)																																																																																																																																																																																															
169	900	169	900	Request for expedited examination of a design application																																																																																																																																																																																															
Other fee (specify) _____																																																																																																																																																																																																			
*Reduced by Basic Filing Fee Paid					<b>SUBTOTAL (3) (\$ 0)</b>																																																																																																																																																																																														
2. EXTRA CLAIM FEES <table border="1"> <thead> <tr> <th>Total Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>56</td> <td>-20 **</td> <td>= 36</td> <td>X 9 = 324</td> </tr> <tr> <td>Independent Claims</td> <td>3</td> <td>-3 **</td> <td>= 0</td> </tr> <tr> <td>Multiple Dependent</td> <td></td> <td></td> <td>X = 0</td> </tr> </tbody> </table> Large Entity Small Entity Fee Code Fee Code Fee Description 103 18 203 9 Claims in excess of 20 102 84 202 42 Independent claims in excess of 3 104 280 204 140 Multiple dependent claim, if not paid ** Reissue independent claims over original patent 109 84 209 42 ** Reissue claims in excess of 20 and over original patent 110 18 210 9					Total Claims	Extra Claims	Fee from below	Fee Paid	56	-20 **	= 36	X 9 = 324	Independent Claims	3	-3 **	= 0	Multiple Dependent			X = 0	SUBTOTAL (1) (\$ 370)  SUBTOTAL (2) (\$ 324)																																																																																																																																																																														
Total Claims	Extra Claims	Fee from below	Fee Paid																																																																																																																																																																																																
56	-20 **	= 36	X 9 = 324																																																																																																																																																																																																
Independent Claims	3	-3 **	= 0																																																																																																																																																																																																
Multiple Dependent			X = 0																																																																																																																																																																																																

\*\*or number previously paid, if greater; For Reissues, see above

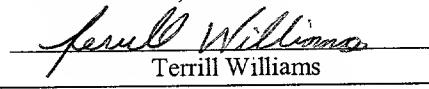
SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Robert W. Gauthier	Registration No. Attorney/Agent)	35,153	Telephone	(617)832-1175
Signature				Date	October 31, 2001

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0 2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U S Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that the foregoing document is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to: Box Patent Application, Commissioner for Patents, Washington, D.C. 20231, on this date of **October 31, 2001**.

  
\_\_\_\_\_  
Terrill Williams

U.S. GOVERNMENT PRINTING OFFICE: 2001 500-750-000